



White Peak

Green Finance Second Opinion

June 21, 2019

White Peak is a Swedish real estate company headquartered in Beijing focusing on property investment and development in China. White Peak currently maintains 9 local offices across China and aims to transfer Swedish management perspectives to property development in China. White Peak plans and develops the building projects, but does not operate, manage or maintain the buildings after project completion.

The green finance framework lists eligible projects within the green building category that promote the necessary development of more energy efficient buildings in China. The framework targets new commercial and residential building projects that achieve at least 20% energy savings compared to the applicable Chinese national standard JGJ26-2010 and meet at least two out of five given building standards. Of the standards, either LEED Gold, BREEAM Very Good or Chinese Green Building Design 2 star certification is required.

The framework excludes fossil fuel based heating sources in cases where no centralized heating sources are provided. Centralized heating in China, however, is often fossil fuel based.

White Peak's governance structure is sound, transparent and aligns with the Green Bond Principles and Green Loan Principles. The overall assessment of the governance structure to support the implementation of the green finance framework gives it a rating of **Good**. White Peak requires feasibility and environmental studies compiled by external experts and verified by third-party agencies for all projects. The company generally aims to provide some charging infrastructure for electric vehicles, public transport access and aims to utilize energy saving building materials.

Based on the overall assessment of the project types that will be financed by the green finance, governance and transparency considerations, White Peak's green finance framework receives a **CICERO Medium Green** shading. The framework would benefit from a higher level of targeted energy savings, an ambition to replace fossil fuel based centralized heating with renewable energy sources, higher building certification levels and life cycle emission considerations that lead to significantly lower climate impacts, climate resilience assessments that are in line with TCFD recommendation, managing and reducing supply chain and construction greenhouse gas emissions as well as climate impact of building materials beyond the energy saving ambitions.

SHADES OF GREEN

Based on our review, we rate the White Peak green finance framework **CICERO Medium Green**.

Included in the overall shading is an assessment of the governance structure of the green finance framework. CICERO Shades of Green finds the governance procedures in White Peak's framework to be **Good**.



GREEN BOND AND GREEN LOAN PRINCIPLES

Based on this review, this framework is found in alignment with the principles.





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the White Peak's Green Finance Framework dated **March, 2019**. This second opinion remains relevant to all green bonds and loans issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the issuer's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence with the issuer. Second opinions are restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO Green is not responsible for an institution's implementation of a framework, nor does it guarantee or certify the climate effects of investments in eligible projects.

Expressing concerns with 'Shades of Green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions of the bonds and loans. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

CICERO Shades of Green

Examples



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Wind energy projects with a strong governance structure that integrates environmental concerns



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Bridging technologies such as plug-in hybrid buses



Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.



Efficiency investments for fossil fuel technologies where clean alternatives are not available



Brown is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.



New infrastructure for coal

Sound governance and transparency processes facilitate delivery of issuer's climate and environmental ambitions laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the Green Finance Framework. CICERO Green considers four factors in its review of an issuer's governance processes: 1) the policies and goals of relevance to the Green Finance Framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent.



2 Brief description of White Peak's Green Finance Framework and related policies

White Peak is a Swedish real estate company headquartered in Beijing focusing on property investment and development in China. White Peak currently maintains 9 local offices across China and has 360 employees on staff. The issuer aims to transfer Swedish management perspectives to property development in China and in particular to establish sustainable development and green performance best practices in China. The issuer informed us that they currently intend to issue bonds or loans only outside of China.

Environmental Strategies and Policies:

White Peak has comprehensive environmental strategies and policies as the issuer aspires to be a responsible partner in terms of local responsibility and environmental protection. White Peak's Green Finance Committee (see Selection below) oversees the sustainability performance throughout the portfolio and provides regular training to the company's staff. In 2017, White Peak's portfolio emissions from Scope 1 and Scope 2 decreased by 9.9% compared to 2016. Absolute energy consumption also decreased by 10.5% compared to 2016 in a like-for-like change.

The issuer informed us that the company aims for all buildings constructed by the company to achieve an energy efficiency improvement of at least 20% compared to the latest China national standard "Residential Building Energy Conservation Design Standards JGJ26-2010.

White Peak creates Environmental Management Plans for all projects covering regulatory compliance, monitoring environmental impacts (e.g., dust and noise), resources demand, emissions and waste management among others. The issuer informed us that these reports are prepared by external experts and evaluated by a government-designated third-party agency. White Peak informed us that it aims to follow the ISO14001 guidelines for an environmental management system for contractors as closely as possible. Additionally, requirements for tenants include, e.g., regular reporting of water usage, electricity and gas consumption.

White Peak has some standard procedures to identify and manage exposure to climate risks, such as applying Chinese flood prevention standards, but does not currently implement TCFD recommendations and respective climate risk scenario analysis. According to the issuer, for instance, the flood prevention capacity should be able to handle the requirements for a period as long as 100 years.

Use of proceeds:

According to White Peak's green finance framework, proceeds will be used to finance or refinance green buildings in China. The issuer informed us that White Peak anticipates allocating the majority of the proceeds to new financing. Eligible assets can be new commercial or residential buildings in China that are certified or are to be certified according to two out of five certification schemes (see Table 1 for details). At least one of the certifications will come from the Chinese Green Building Star Label, BREEAM or LEED system. In addition, projects must achieve at least 20% higher energy efficiency than required by the latest China national standard "Residential Building Energy Conservation Design Standards JGJ26-2010" and must be located in areas of well-established public transport plans. In cases where no centralized heating sources are provided, only renewable energy is utilized.



Selection:

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

White Peak has established a Green Finance Committee that is mandated to evaluate and select projects according to White Peak's green finance framework. Members of the committee will be representatives of White Peak's Senior Management, Business Development, Operations, Design, Project Management and Procurement. Decisions are made in consensus. A feasibility study conducted by the Business Development and Design, compiled by external experts and evaluated by a third-party designated by the government is required to evaluate potential environmental impact and to verify energy saving plans. According to the issuer, external environmental expertise is part of the feasibility study and the environmental impact studies for all projects. After project selection, White Peak benchmarks the sustainability performance of the selected projects to match the framework according to an Environmental Management System (EMS) and an Environmental Impact Assessment (EIA).

Management of proceeds:

Net proceeds will be credited to a dedicated account to support White Peak's investments in eligible assets. As long as green financing is outstanding, and the earmarked account has a positive balance funds may be deducted from this earmarked account and added to White Peak's investment pool with an amount up to the total of all disbursements from that pool made toward eligible assets.

In the event the amount of outstanding financing exceeds the eligible asset portfolio, through the sale of completed eligible assets White Peak will replace such assets once new projects have been identified as green in accordance with this framework. Unallocated proceeds will be placed in a cash account and, according to the issuer, cannot be used for fossil fuel project financing.

Reporting:

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs. Procedures for reporting and disclosure of green finance investments are also vital to build confidence that green finance is contributing towards a sustainable and climate-friendly future, both among investors and in society.

White Peak will provide an annual investor letter including a list of financed assets, a selection of investment examples and a summary of White Peak's green finance development. The report will be published on White Peak's website. In addition, the issuer has informed us that they will provide annual impact reporting on the eligible asset portfolio on project-by-project basis. The reported impacts include level of achieved certifications, energy performance per square meter, Estimated annual amount of energy savings in relation to applicable national codes and regulations (i.e. Residential Building Energy Conservation Design Standards JGJ26-2010). In addition, the methodology of measuring these impacts will be disclosed.

According to White Peak, its role as project developer only allows impacts to be reported as estimate in accordance with legislation and established and credible standards and processes. No follow-up reporting after completion of the project will be provided.

According to White Peak, an independent external assurance provider will assess the evaluation process and allocation of proceeds in line with the framework on an annual basis. The report will be made publicly available.



3 Assessment of White Peak’s Green Finance Framework and policies

The framework and procedures for White Peak green finance investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where issuers should be aware of potential macro-level impacts of investment projects.

Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in White Peak’s Green Finance Framework, we rate the framework **CICERO Medium Green**.

Eligible projects under the White Peak Green Finance Framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green loans and bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bond Principles and Green Loan Principle state that the overall environmental profile of a project should be assessed and that the selection process should be well defined.

Category	Eligible project types	Green Shading and some concerns
Green buildings	<p>New commercial or residential buildings certified or to be certified with at least two of below environmental certification systems with the minimum requirements of</p> <ul style="list-style-type: none"> Chinese Green Building Label: Chinese Green Building Design 2 star WELL Building Standard: Gold Building Research Establishment Environmental Assessment Method (BREEAM): Very Good Leadership in Energy and Environmental Design (LEED): Gold Fitwel: Two-stars <p>and with an energy use per year on a m² basis that is at least 20% less than required by applicable national codes and</p>	<p>Medium Green</p> <ul style="list-style-type: none"> Setting a threshold of 20% energy savings is an important step toward a 2050 solution but is not ambitious enough considering the long-term nature of the underlying assets. In a low carbon 2050 perspective passive and plus house technologies become mainstream. Voluntary environmental certifications do not guarantee a reduction in GHG emissions nor do they necessarily include considerations of resiliency. In China, central heating is common, often provided by the municipality and by a large share based on fossil fuels. Only renewable energy sources will be used in cases where no central heating sources are available. Some water efficiency requirements, but no targets regarding water efficiency.



regulations (i.e. Residential Building Energy Conservation Design Standards JGJ26-2010).	✓ All projects will be located in areas of well-established public transport plans.
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At least one of the certifications will come from the Chinese Green Building Star Label, BREEAM or LEED system.

All project developments will be located in areas of well-established public transport plans and renewable energy sources utilized in cases where no central heating sources are available

Table 1. Eligible project categories

Background

According to the International Energy Agency (IEA), the buildings and buildings construction sectors combined are responsible for 36% of global final energy consumption in 2018 and nearly 40% of total direct and indirect CO₂ emissions. Appliances (excluding heating, cooking and cooling appliances) are responsible for around 17% of final electricity use by buildings. The energy and emissions savings potential remain largely untapped because of continued use of less efficient technologies, lack of effective policies and weak investments in sustainable buildings. The IEA's Sustainable Development Scenario suggests 50% of new constructed building area in 2030 to be near zero emission – in addition to increased renewable heat sources up to 25% in 2030.¹ Energy efficient buildings are crucial building blocks towards reaching the 2°C goal.

According to the IEA, Energy use in China has risen by nearly 20% since 2000. With buildings accounting for about 25% of the energy use in China, energy efficiency offers the opportunity of large emission reductions. In 2016, 33% of total floor areas in China were heated by coal-fired boilers for commercial heat production and 51% was provided by mostly coal based co-generation. The different regional building codes in China vary greatly regarding energy usage, allowing for a wide variety of ambition of energy efficiency in China. While the WELL building code aims for improved indoor living quality, the Chinese Green Building label can be rated from one to three stars and weights energy efficiency with about 23%, but includes energy efficiency also in other aspects such as building materials.

Physical climate change such as extreme events and flooding are affecting all sectors and regions already. Due to historical emissions, we are de facto locked in for approximately 1.5°C global warming.² Given today's policy ambition, the world is most likely heading toward 3°C warming in 2100 which implies accelerated physical climate impacts, including more extreme storms, accelerated sea level rise, droughts and flooding.³ For near-term physical risk, investors and companies must consider the probabilities of physical events and resiliency measures to plan for and protect against the worst impacts. Apart from energy efficiency, water efficiency investments, particularly in regions vulnerable to drought or pervasive water scarcity, are therefore important climate resiliency measures.

¹ <http://www.iea.org/tcep>

² <https://www.cicero.oslo.no/en/posts/news/scientists-demystify-climate-scenarios-for-investors>

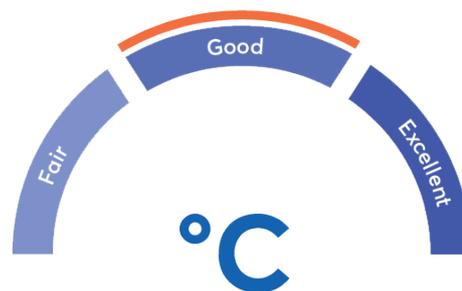
³ https://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf



Governance Assessment

Four aspects are studied when assessing White Peak's governance procedures: 1) the policies and goals of relevance to the green finance framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.

White Peak has in place relevant environmental policies, requirements toward subcontractors and goals, which include the ambition to only pursue building development projects with resulting in at least 20% more energy efficient buildings than applicable national codes and regulations require. In addition, the framework requires mandatory feasibility studies and environmental impact studies for all projects compiled by external experts and verified by third-party agencies designated by the government. Projects are selected in consensus. White Peak will report annually on allocation and impact, will disclose the impact measurement methodology and obtain third-party verification of the reporting. The overall assessment of the governance structure to support the implementation of the green finance framework gives it a rating of **Good**.



Strengths

The issuer informed us that building development projects are only eligible where well-established public transport plans are in place in the area and that the energy intensity requirement of 20% better than regulation is intended to become company policy. In addition, White Peak guarantees 100% of the projects will reserve the power capacity for charging stations and that White Peak will install charging stations for 2% of the total parking capacity, which is larger than the current ratio of electric vehicles to the total number of cars in China. This is a strength, as it reduces climate impact that might be associated with new building projects.

White Peak informed us that it allows only for sanitary appliances with a certain level of water efficiency to be included in the projects. White Peak also conducts some climate resilience assessments regarding current and future flooding, snow and wind exposure. Regarding building materials, White Peak collaborates with Swedish suppliers to reduce resource consumption and select recyclable and reusable materials.

It is a best practice example and a clear strength that every project receives an externally compiled feasibility and environmental study that is verified by third-party agencies. Additional environmental policies and ambitions regarding environmental impacts (e.g., ambition to follow the ISO140001 guidelines for an environmental management system for contractors as closely as possible, an environment community management plan of construction etc.) toward subcontractors constitute an additional strength.

Weaknesses

The issuer does not have general climate targets and currently does not sufficiently monitor and manage greenhouse gas emissions from construction or the supply chain.

Pitfalls

Green building certifications do not guarantee reduced emissions or other environmental benefits. Certification programs have varying requirements that are weighted with a score. White Peak does not distinguish between how the building scored in climate relevant aspects. The resulting emissions can vary greatly and the impact on the



environment can range from negligible to significant. In addition, actual greenhouse gas emissions of the buildings during operation as well as related transportation and supply chain emissions are not explicitly targeted or reported by White Peak.

In general, CICERO Green assess if there is any screening for potential impacts from more extreme weather events, such as flooding. The issuer currently does not consider climate scenarios aligned with TCFD for future climate risks for building projects, but has some standard procedures to identify and manage exposure to climate risks, such as applying Chinese flood prevention standards. Flood risk for properties, is of particular concern in vulnerable geographic regions such as close to rivers or lakes.

CICERO Dark Green shading is in particular difficult to achieve in the building sector because buildings have a long lifetime. CICERO Dark Green shading in the building sector should therefore conform to strict measures and is reserved for the highest building standards, Zero-Energy buildings and passive houses that comply with a 2050 low-carbon perspective. While CICERO Green recognizes the targeted effort of an energy intensity threshold of 20% above regulation, this falls short to what is needed to meet global emissions reductions targets in the building sector. In a low carbon 2050 perspective, the energy performance of buildings is expected to be improved, with passive house technology becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. 50% of new constructed building area should be constructed as near zero emission buildings in 2030– in addition to increased renewable heat sources. The issuer informed us that the 20% threshold implies a control heat consumption index between the limits of 6.2W/m² and 15.1W/m². According to the issuer this would result in an estimated annual energy intensity of between 15kWh/m²/year and 55kWh/m²/year considering that the days of heating period is only a fraction of a year.

In order to achieve a Dark Green shading, the issuer could aim for a higher level of targeted energy savings, an ambition to replace fossil fuel based centralized heating with renewable energy sources, higher building certification levels and life cycle emission considerations that lead to significantly lower climate impacts, climate resilience assessments that are in line with TCFD recommendation, managing and reducing supply chain and construction emissions as well as climate impact of building materials beyond the energy saving ambitions.



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
0	White Peak Green Finance Framework March, 2019	White Peak's Green Finance Framework
1	White Peak's Environmental Policy	List of White Peak's internal and external environmental policies
2	ISO14001 manual, January 2016	White Peak's ISO14001 documentation
3	Environment Management Procedures list, January 2017	White Peak's list of environmental management procedures at White Peak
4	Environmental Requirement for Suppliers	White Peak's environmental requirements for suppliers
5	Mount Tai Project's Feasibility Study Report	Feasibility study report for the Mount Tai Project
6	Rui Ping Project's Environment Impact Assessment Report	Environment impact report for the Rui Ping project
7	Green building design label declaration Self-evaluation report (preliminary evaluation)	Preliminary self-evaluation report for the green building design label
8	White Peak Tai'an Sustainable Project Optimization	Optimization suggestions for the Tai'an project
9	White Peak Real Estate Investments	GRESB Real Estate Assessment
10	2017 Sustainability Report White Peak Real Estate	White Peak's Sustainability Report 2017
11	The WELL Building Standard	Description of the WELL building standard
12	Fitwell: Healthy Building Standard	Introductory Seminar of the Fitwel building standard



Appendix 2: About CICERO Shades of Green

CICERO Shades of Green (CICERO Green) is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond and green finance investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing bonds and loans, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

